

**Notice of Allowability**

Application No.

10/033,521

Examiner

Uyen T. Le

Applicant(s)

TEN-HOVE ET AL.

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 22 February 2005.
2. ☒ The allowed claim(s) is/are 1-15,21-35,41-55 renumbered as 1-45.
3. ☒ The drawings filed on 18 October 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bobby K. Truong (Reg. No. 37,499) on 9 March 2005.

The application has been amended as follows:

Claim 1, line 1 —computer-implemented—has been inserted before "method".

2. Claim 1 now reads as follows:

A computer-implemented method for processing a source entity with a transformation entity to derive a result entity, comprising:

executing an action set forth in a particular portion of said transformation entity, a particular portion of said source entity being a subject of said action;

generating a particular portion of said result entity as a consequence of executing said action; and

associating a set of history information with said particular portion of said result entity, said history information comprising a reference to said particular portion of said transformation entity and a reference to said particular portion of said source entity to indicate that said particular portions of said transformation entity and said source entity gave rise to said particular portion of said result entity.

3. The following is an examiner's statement of reasons for allowance: applicant canceled all rejected claims. Therefore, claims 1-15, 21-35, 41-55 renumbered as 1-45 are allowed for the reasons stated in the previous Office Action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Netzer (US 5,870,607) teaches selective replay of computer programs.

Daudenarde (US 6,418,450) teaches data warehouse architecture wherein a transformation program is invoked to transform source data to generate target data.

Atkins et al (US 6,125,375) teach visualizing program slices.

Clarke et al (US 5,754,759) teach testing and monitoring of programmed devices.

Shimomura (US 5,854,925) teaches automatic bug locator for automatically locating bugs through interaction with an operator.

Bahlke et al, "A Generator for Language-Specific Debugging Systems", ACM 1987, pages 92-101.

Francel et al, "Fault Localization Using Execution Traces", ACM 1992, pages 69-76.

Ducasse, "Coca: An automated Debugger for C", ACM 1999, pages 504-513.

Wilson et al, "Demonic Memory for Process Histories", ACM 1989, pages 330-343.

Yoon et al, "Cognitive Activities and Support in Debugging", IEEE 1998, pages 160-169.  
Agrawal et al, "An Execution-Backtracking Approach to Debugging", IEEE 1991, pages 21-26.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T. Le whose telephone number is 571-272-4021. The examiner can normally be reached on M-F 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9 March 2005



**UYEN LE**  
**PRIMARY EXAMINER**